UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I 5 POST OFFICE SQUARE, SUITE 100 BOSTON, MA 02109-3912

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

December 22, 2009

Arnel Company, Inc. c/o David Platt, Esquire Murtha Cullina LLP CityPlace 1, 185 Asylum Street Hartford, CT 06103-3469 dplatt@murthalaw.com

Re:

Arnel Company, Inc.

Request for Information Pursuant to Section 114 of the Clean Air Act

Dear Mr. Platt:

The U.S. Environmental Protection Agency (EPA) is investigating an explosion and fire that occurred at the Arnel Company, Inc. facility located in Danvers, Massachusetts, on or about November 22, 2006. The purpose of this letter is to request follow up information related to the incident.

The authority for this request comes from Section 114(a)(1) of the Clean Air Act (CAA), 42 U.S.C. § 7414(a)(1), which authorizes EPA to require any person who owns or operates any emission source to provide information that EPA may reasonably require to determine whether any person is in violation of any requirement of the CAA. You are hereby directed to respond to the Information Request enclosed herein as Enclosure A within thirty (30) days of your receipt of this letter.

Please be advised that compliance with this request for information is mandatory. Failure to respond fully and truthfully to each question or information request within thirty (30) days of your receipt of this letter, or to adequately justify such failure to respond, may result in an enforcement action being filed against you pursuant to Section 113 of the CAA, 42 U.S.C. § 7413. This statute permits EPA to seek the imposition of penalties of up to thirty-seven thousand five hundred dollars (\$37,500) per day of continued non-compliance with this request. Please be further advised that submittal of false, fictitious or fraudulent statements or representations may subject you to criminal penalties under Section 113(c) of the CAA, 42 U.S.C. § 7413(c).

Your response to this request for information should be mailed to:

Leonard Wallace, Environmental Scientist RCRA, EPCRA, Federal Facilities Unit U.S. EPA, Region 1 5 Post Office Square, Suite 100 Mail Code OES05-1 Boston, MA 02109-3912

This Information Request is not subject to the approval requirements of the Paperwork Reduction Act of 1980, 44 U.S.C. § 3501 et seq.

If you have any legal or technical questions relating to this Information Request, you may consult with EPA prior to the date specified in this letter. Please direct questions to Amelia Welt Katzen, Senior Enforcement Counsel, at (617) 918-1869. Thank you for your cooperation in this matter.

Sincerely,

Susan Studlien, Director

Office of Environmental Stewardship

Dam Dilverman, acting for

Enclosure

Cc: Mary Reed, Esquire, DOJ

ENCLOSURE A

INFORMATION REQUEST

Instructions

- 1. Please provide a separate narrative response to each and every question set forth in this Information Request.
- 2. Precede each answer with the number of the question to which it corresponds.
- 3. If information or documents not known or not available to you as of the date of submission of a response to this Information Request should later become known or available to you, you must supplement your response to EPA. Moreover, should you find, at any time after the submission of your response, that any portion of the submitted information is false or misrepresents the truth, you must notify EPA of this fact as soon as possible and provide EPA with a corrected response.
- 4. For each document produced in response to this Information Request indicate on the document, or in some other reasonable manner, the number of the Question to which it responds.
- 5. For any document that is responsive to a question set forth in this Information Request that is no longer available to you as of the date of submission of your response, provide the name and contact information for any person who prepared the document and/or had knowledge of its contents.
- 6. The information requested herein must be provided even though Arnel Company, Inc. may contend that it includes possible confidential information or trade secrets. You may, if you desire, assert a confidentiality claim covering part or all of the information requested, pursuant to Section 114(c) of the CAA, 42 U.S.C. § 7414(c), and 40 C.F.R. Section 2.203(b), by attaching to such information at the time it is submitted a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as "trade secret," or "proprietary," or "company confidential." Information covered by such a claim will be disclosed by EPA only to the extent, and only by means, of the procedures set forth in the statute and regulation identified above. If no such claim accompanies the information when it is received by EPA, it may be made available to the public by EPA without further notice to you. You should read the above cited regulations carefully before asserting a business confidentiality claim, since certain categories of information are not properly the subject of such a claim.

Please note the burden of proof is on you to demonstrate that information claimed as confidential satisfies the criteria set forth in 40 C.F.R. § 2.208. If any portion of your response contains business information which you claim as confidential, you must submit two copies of any such business information in accordance with the following procedures:

- 1) The <u>first copy</u> of any document containing such "confidential business information" ("CBI") must be complete and contain all information. Additionally, each such page must be marked conspicuously to indicate that it is claimed as confidential.
- 2) The <u>second copy</u> of any document that is subject to a CBI claim must be redacted so that it contains only information that is <u>not</u> claimed as confidential.

Definitions

The following definitions shall apply to the following words as they appear in this Enclosure A:

- 1. The term "you" or "Arnel" shall include Arnel Company, Inc., the addressee of this Request, the addressee's officers, managers, employees, contractors, trustees, partners, successors, assigns, and agents.
- 2. The term "C.A.I." shall mean C.A.I., Inc., which formerly occupied a portion of the facility located at 126R Water Street, Danvers, Massachusetts.
- 3. The term "person" shall have the same definition as in Section 302(e) of the CAA, (i.e., an individual, corporation, partnership, association, State, and any agency, department, or instrumentality of the United States and any officer, agent, or employee thereof).
- 4. The term "facility" means the manufacturing plant (including all physical structures) operated by C.A.I., Inc. and Arnel Company, Inc., that is or was formerly located at 126R Water Street, Danvers, Massachusetts.
- 5. The "incident" means the explosion and/or chemical release(s) that occurred on or about November 22, 2006.
- 6. The term "document" means any object that contains, records, stores or presents information, whether in paper, electronic or any other form.
- 7. The term "identify" means, with respect to a natural person, to set forth the person's name, present or last known business address and business telephone number, present or last known home address and home telephone number, and present or last known job title, position or business.
- 8. The term "identify" means, with respect to a corporation, partnership, business trust or other association or business entity (including a sole proprietorship), to set forth its full name, address, legal form (e.g., corporation, partnership, etc.), organization, if any, and a brief description of its business.

- 9. The term "identify" means, with respect to a document, to provide its customary business description, its date, its number, if any (invoice or purchase order number), the identity of the author, addressor, addressee and/or recipient, and the substance or the subject matter.
- 10. The terms "and" and "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of this Information Request any information that might otherwise be construed to be outside its scope.
- 11. All terms not defined herein shall have their ordinary meaning, unless such terms are defined in the Clean Air Act or 40 C.F.R., in which case the statutory or regulatory definitions shall apply.
- 12. A requested document, item or information shall be deemed to be in your "possession, custody or control" if you know where it is and can obtain access to it, even if it is not presently in your possession.

Questions

Facility

- 1. Please provide copies of all photos within your possession, custody or control that depict any visual aspect of the interior or exterior of the facility as it existed prior to the explosion and fire that occurred on or about November 22, 2006.
- 2. Provide a plan of the facility showing its layout, including the location of production tanks, process vessels, and storage containers (including tanks, totes, drums, and other containers). The plan should illustrate where specific chemicals were stored, the location of sprinkler systems, fire doors, fire suppression systems, smoke and chemical detectors, heating/air conditioning and ventilation systems, thermostats, emergency alarms, exits, electrical transformers, emergency response equipment, propane tanks, and any areas where there were changes in floor level. The plan should also indicate which processes, storage containers and equipment belonged to Arnel, which belonged to C.A.I., and which were shared. Provide all piping and instrumentation diagrams ("P&IDs") for the facility.
- 3. Identify all persons employed by Arnel at the time of the incident, including their current contact information, job title, and length of service with the company.

Chemicals Used

- 4. For each of the following substances, provide the maximum and typical amounts stored at the facility in 2005 and 2006, and provide any available documentation that supports your response: acetone, n-Butyl acetate, toluene, methyl ethyl ketone (MEK), ethyl alcohol, propyl alcohol, butyl alcohol, ethyl acetate, hi flash naphtha, methyl isobutyl ketone (MIBK), xylol, nitrocellulose, and any substance listed in 40 C.F.R. § 68.130.
- 5. Please describe where the substances listed in paragraph 4 were stored at the facility. Describe the containers in which they were stored. Describe any systems in place to prevent and contain releases from such storage containers (e.g., secondary containment, valve shutoffs, leak detection devices, etc.). Describe the means by which chemicals were removed from each type of container (e.g., by pump, gravity feed, bottom valve, etc.).

Manufacturing Process

6. Please describe all manufacturing processes at the facility involving the manufacture, handling, storage or processing of acetone, n-Butyl acetate, toluene, methyl ethyl ketone (MEK), ethyl alcohol, propyl alcohol, butyl alcohol, ethyl acetate, hi flash naphtha, methyl isobutyl ketone (MIBK), xylol, and nitrocellulose, from 2005 to the time of the incident. Provide a narrative explanation and a simplified process flow diagram of these processes, including all P&IDs.

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Hazard Analysis

- 7. Provide the written process hazard analyses ("PHA") required by 29 C.F.R. §1910.119(e), including but not limited to all elements required by §1910.119(e), including updated process hazard analysis done within the past five years and all earlier PHAs for the processes.
- 8. Provide all other hazard analyses, including but not limited to Hazard and Operability ("HAZOP") studies, insurance company audits and any other hazard analysis pertaining to these processes from 1996 to the time of the incident. Identify outside parties who participated in conducting any such analyses. Describe whether the hazard analyses identified potential release scenarios and their potential impacts on the public and the environment. List any safety devices, instrumentation, interlocks, or other protective measures that were added as a result of these hazard analyses. Provide all documents, reports and memoranda pertaining to the process chemistry and chemical safety of processing, handling, and storing of acetone, n-Butyl acetate, toluene, methyl ethyl ketone (MEK), ethyl alcohol, propyl alcohol, butyl alcohol, ethyl acetate, hi flash naphtha, methyl isobutyl ketone (MIBK), xylol, and nitrocellulose.
- 9. Prior to the incident, had you identified any equipment malfunctions or opportunities for human error that could have resulted in accidental chemical releases at the facility? If so, please describe.

Administrative Safety Controls

10. Describe the administrative safety controls, including, without limitation, comprehensive operating procedures, hazards evaluation, training, and explosion prevention techniques, used at the facility. Describe the facility's mechanisms, such as operator checklists or other formal quality control measures, for addressing such malfunctions in operating procedures as overheating a batch or using an incorrect product recipe. Provide documentation of any such controls.

Mechanical Safety Controls at Facility in General

- 11. Describe the process safety management systems and safety protection equipment that were in use at the facility prior to the incident.
- 12. Describe the emergency shutdown systems, alarms, interlocks or safeguards that would prevent highly flammable vapor emissions from reaching explosive concentrations within the confines of the facility. Provide the product name, the date installed, and the location of such equipment/system.
- 13. Describe any explosive level detection equipment that would provide alerts and notification of unexpected flammable concentrations of chemicals at the facility.
- 14. Describe any purging or inert gas systems that were available for equipment that could be subject to a flammable or explosive atmosphere.
- 15. Indicate the standard operating procedure for inspecting each of the systems or controls referenced in the foregoing paragraphs 11-14, and provide all records of those inspections.

16. Describe the types of forklift used at the facility and provide documentation for their rating by Underwriters Laboratories for use in areas containing explosive or flammable materials.

Mechanical Safety Controls for Production Vessels

- 17. Describe mechanical safety controls, such as a high integrity temperature monitoring and detection alarm system or interlock devices, at the facility that would prevent the overheating of the chemical production vats and that would prevent the heating of flammable liquids to temperatures at or above their flash points. Indicate the standard operating procedure for inspecting these controls and provide all records of those inspections.
- 18. Explain in a narrative format the number and location of temperature and pressure measurement devices, alarms, and interlocks operational at the time of the incident and how they would have worked during a malfunction of the process tanks to prevent a chemical release.
- 19. Describe whether the mixing tanks at the facility had gas-tight closure such that no vapors could escape from them. If the mixing tanks did have gas-tight closures, explain the possible source of fumes that various Arnel and C.A.I. employees reported to have smelled on mornings after the ventilation system had been shut off for the night.

Ventilation System

- 20. Describe the type of fabric filter in the ventilation system and the particulate pollution control device and state how they related to each other. Describe how the facility prevented or controlled the commingling of flammable solvent vapors and dust through a common fabric filter ventilation and dust collection system. Describe how the facility addressed the danger of explosion posed by exposing dust to static electricity and how it addressed the danger of fire posed by using fabric filters for solvent vapors.
- 21. Describe how the facility maintained the ventilation at a sufficient level to prevent the concentration of vapors in the facility from exceeding 25% of their lower limit of flammability. Describe the facility's means of providing for the introduction of make-up air during production.

Nitrocellulose

- 22. Describe the operating procedures in place to ensure safe usage and storage of nitrocellulose at the facility. Describe the area, including temperature controls and ventilation, in which nitrocellulose was stored at the facility.
- 23. Describe how spilled nitrocellulose was handled and in what kind of containers spilled nitrocellulose was stored. Were such containers closed?

Industry and Regulatory Safety Standards

24. Describe any regulations, specific building codes, design codes, and industry consensus standards/guidelines that you followed to prevent or mitigate chemical releases, including but not limited to codes and standards issued by the American National Standards Institute, the

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American Society of Mechanical Engineers (ASME), National Fire Protection Association (NFPA), local and state fire codes, and American Institute of Chemical Engineers publications.

- 25. Provide all contracts, agreements, and documents relating to the facility's relationship with trade organizations such as the Chemical Manufacturer's Association, the National Association of Printing Ink Manufacturers, or the American Chemical Council. Provide any and all documents showing membership in such organizations and follow-up documents such as audit materials.
- 26. Describe whether Arnel was subject to OSHA's standards for flammable and combustible liquids at 29 C.F.R. §1910.106. Describe whether and how you complied with such standards, including the following: 29 C.F.R. § 1910.106(b)(4)(ii) (venting of flammable liquid storage tanks to outdoors); 29 C.F.R. § 1910.106(b)(4)(iv)(b) (suitability of piping connections to tanks); 29 C.F.R. § 1910.106(e)(3)(v)(a) and (b) (ventilation); 29 C.F.R. § 1910.106(h)(4)(i)(c) (separation of process areas from flammable liquids storage); 29 C.F.R. § 1910.106(h)(4)(iii) (transfer of flammable liquids). Identify the Arnel employee who was responsible for compliance with 29 C.F.R. §1910.106.

Building Construction

- 27. Describe the type and location of any passive mitigation system, such as explosion vents or blow-out panels, that would lessen the force of an explosion in the facility.
- 28. Describe the procedures used to ensure that fire doors were properly operated in a manner to prevent flame propagation.

Emergency Planning and Response

- 29. Did the facility have an emergency response plan? If so, describe the plan's procedures for assessing and responding to chemical spills or releases, as well as the procedures for informing the public, the fire department, and the Local Emergency Planning Committee about any chemical releases or fires. Provide a copy of this plan, if available.
- 30. Please list all chemical accidents, explosions or releases at the facility that occurred from 1996 to the present involving, but not limited to, the manufacture, handling, storage or processing of acetone, n-Butyl acetate, toluene, methyl ethyl ketone (MEK), ethyl alcohol, propyl alcohol, butyl alcohol, ethyl acetate, hi flash naphtha, methyl isobutyl ketone (MIBK), xylol, nitrocellulose, and any substance listed in 40 C.F.R. § 68.130. Provide all reports and narrative explanations in your possession, custody or control as to what happened in these incidents. Provide all documents, reports and memoranda pertaining to chemical safety analysis and/or investigations of these incidents.
- 31. Provide any written documents or reports relating to incident investigation that you prepared pursuant to 29 C.F.R. §1910.119(m)(4) or the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. §11045(b), following the incident.

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32. Please provide copies of all documents in your possession, custody or control that reflect any and all complaints, legal proceedings and/or inquiries by businesses and residents arising from the incident. Provide names, addresses and descriptions of damages to businesses and residents arising from the incident. Provide all insurance inquiries and reports related to the incident.